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**Defense Depot Maintenance Council
Study of DoD Management of
Industrial Plant Equipment**



**The
Military Services
Majority Report**

February 1, 1991

THE
MILITARY SERVICES MAJORITY
REPORT

DEFENSE DEPOT MAINTENANCE COUNCIL
STUDY OF DoD MANAGEMENT OF
INDUSTRIAL PLANT EQUIPMENT (IPE)

FEBRUARY 1, 1991

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EXECUTIVE SUMMARY

The primary purpose of this Military Services Majority Report is to identify cost savings that can be achieved by analyzing those IPE functions now performed, determining if those functions are essential and making recommendations to improve and streamline IPE management. A secondary purpose is to ensure that the position of the Services is known and forwarded to the DoD decision makers.

This study covers the full scope of IPE management within DoD, including mobilization planning, inventory management, general reserve, cataloging, engineering, standardization, specifications preparation, acquisition, storage, and maintenance.

The functions of both DIPEC and the Military Services were thoroughly examined. This study indicated each Service effectively manage IPE like any other capital asset within their existing organizations. Several recommendations were made to improve the management of IPE. DLA and the Services agreed only to reduce the general reserve by limiting retention of IPE to FSG 34 and raise the dollar threshold to \$15,000, eliminate reporting of in-use IPE and adopt the NSN as the single identification system for IPE.

The Military Services concluded the costs associated with maintaining the general reserve can be reduced significantly. The remaining usable IPE assets should be assigned to the Services, if required, and the residual items excessed. DIPEC, the organization now managing the general reserve, should be reduced in size and consolidated with one of the DLA ICPs. The functions, contracting, repair and rebuild, specification preparation, as well as the other functions now performed, should be reassigned to the existing Service/DLA organizations and activities.

The DoD savings to be achieved through this effort will be in excess of \$100M between FY93 and FY97. The closure of DIPEC, the discontinuance of storing items no longer necessary to national security, and the elimination of duplicate screenings and reporting will save DoD valuable resources needed in today's shrinking defense budget.

Section 1.0

GENERAL

1.1 BACKGROUND

In an Assistant Secretary of Defense memorandum, subject: Strengthening Depot Maintenance Activities, dated 30 June 1990, Deputy Secretary of Defense Atwood established the Defense Depot Maintenance Council (DDMC). The purpose of the DDMC, among other things, is to improve the overall efficiency of depot maintenance operations throughout the Department of Defense (DoD). The Defense Logistics Agency (DLA) was assigned "lead activity" in the area of Industrial Plant Equipment (IPE), with team participation from all Military Services.

A previous study with a more narrowly defined scope of IPE Depot Maintenance Consolidation was completed in May 1990. The previous study focused on the maintenance of IPE at the three DLA sites operated by the Defense Industrial Plant Equipment Center (DIPEC) and the one Army site operated by Seneca Army Depot (SEAD). The Army and DLA were unable to arrive at a common position on this study. DLA did follow through with prior plans to close its smallest IPE rebuild facility at Columbus, OH. The primary reason for closing the Columbus facility was insufficient workload. The Army proposed that significant savings could be realized within DoD through the review and evaluation of the entire spectrum of IPE management.

This study and Defense Management Review (DMR) 995 resulted from that proposal. This report reviews the total IPE management structure within DoD and contains solid recommendations that, if adopted, will result in hard dollar savings to DoD of approximately \$102.5M during FY93 thru FY97 in the IPE arena.

1.2 PURPOSE

The primary purpose of this Military Services Majority Report is to identify where cost savings can be realized in IPE-related functions now performed, to determine what functions are essential and to recommend improvements for streamlined IPE management.

The secondary purpose of this report is to ensure each Service's position is known and forwarded to the appropriate decision making level within DoD.

1.3 SCOPE

This review covers the full range of IPE management in DoD, including mobilization planning, inventory management, general reserve, cataloging, engineering, standardization, specifications preparation, acquisition, storage, and maintenance. Specifically, the report covers the following areas:

- o Organization, mission, functions and authorizations
- o Requirements determination procedures

- o Acquisition procedures
- o Reporting and redistribution procedures
- o Preventative, scheduled and unscheduled maintenance procedures
- o Repair, overhaul and rebuild procedures
- o Funding procedures
- o Recommendations for and against consolidated IPE management.

1.4 ORGANIZATION FOR THE REVIEW

The review of the organization and functions of IPE management identified above was assigned to four DLA-chaired panels. The panels were:

- o Panel A - Mobilization planning, inventory management and the general reserve
- o Panel B - Cataloging, engineering, standardization and specifications
- o Panel C - Acquisition
- o Panel D - Storage, maintenance and records.

The four panels included representatives from DLA, DIPEC and each of the Military Services.

Section 2.0

DISCUSSION

2.1 THE ROLE OF DLA

Since established in 1962, DLA has been and remains primarily a supply organization for consumable items. DLA does not have a depot maintenance mission for any item of supply it manages, with the exception of IPE. Total management for IPE within DLA has been delegated to DIPEC, located in Memphis, TN.

2.2 THE ROLE OF DIPEC

DIPEC was established to consolidate and improve the area of IPE in support of the logistics and mobilization requirements of the Military Services. The Memorandum signed by the Secretary of Defense on 7 Dec 1962 directed the establishment of an "Industrial Equipment Utilization Center". The Report on the Management of Capital Plant Equipment, dated May 1962, which implemented the Secretary of Defense directive, is devoted almost exclusively to providing supply support and technical services to the Military Departments.

The DIPEC mission is one of the broadest within DLA. It encompasses general reserve management, maintenance, technical and contract support for DoD activities, a DoD clearing house for IPE and maintenance of a central inventory of DoD-owned IPE. DIPEC is now a IPE Lead Standardization Activity and Preparing Activity for IPE in the Defense Standardization and Specification Program and maintains a technical data repository for IPE. DIPEC maintains visibility over DoD owned IPE, but does not provide logistics and financial property accountability for active and inactive IPE in Plant Equipment Packages (PEPs), other active IPE and IPE installed in mobile tactical shops. Accountability records for PEPs in DLA storage facilities are maintained either by the Army, a duly appointed Property Officer, or, in some cases, by the contractor. DIPEC has indicated that they are not interested in managing the smaller IPE used in the Service's mobile tactical shop sets for which they, by regulation, maintain no visibility.

DIPEC operates two collocated maintenance and storage facilities and one government-owned contractor-operated (GOCO) storage facility. At the two maintenance facilities, DIPEC provides IPE repair, rebuild, retrofit, condition assessment support and other IPE related technical support to DoD customers.

DIPEC stores the DoD general reserve at seven different locations. The general reserve consisted of some 6,742 items of IPE in 1990. This inventory has decreased annually from 28,178 in 1982.

2.3 THE ROLE OF THE ARMY

The Army is the largest IPE owner (41.4 percent of the total active and inactive DoD inventory). It owns and maintains 10,476 items of IPE in 92 Plant Equipment Packages (PEPs) to meet mobilization requirements. Army PEPs and DoD general reserve items are both stored

at Army storage sites and DIPEC central storage locations. The Army also has 53.7 percent of its IPE in the custody of contractors.

The Army is the only Service directly involved in the IPE rebuild effort. The IPE maintenance mission includes IPE repair and rebuild; maintenance shop set rebuild; condition determination and assessment of active and inactive plant equipment; cleaning, preservation and layaway of plant equipment; polychlorinated biphenyl (PCB) testing; all storage related functions, and machine shop support to an entire installation, in addition to other AMC activities and Project Managers.

Army IPE is typically purchased, used, and maintained by the activity or installation in the possession of the equipment, the same as any other type of property. Equipment authorizations and management and technical support are provided by the command structure over the activity or installation. In the case of IPE in the custody of contractors, the procuring activity authorizes and is responsible for the IPE. IPE rebuild may be done in-house by the activity, installation or contractor using the equipment or by commercial rebuilders, SEAD or one of the DIPEC maintenance sites.

2.4 THE ROLE OF THE NAVY

The next largest owner and user of IPE, Navy, possesses over 31 percent of the total DoD inventory. The Navy maintains nine PEPs for mobilization requirements. Currently, 20 percent of the Navy's IPE is in the custody of contractors. The amount of Navy-owned IPE at contractor plants has steadily declined over the past few years. The Systems Commands and the Naval Industrial Resources Support Activity (NAVIRSA) have management responsibility for IPE. The Navy considers IPE another plant equipment item, a resource utilized to execute various repair, rebuild and manufacturing programs. The Navy provides requirements forecasts to DIPEC, uses the DIPEC IPE repair and rebuild capability for shipboard assets and conforms to the inventory management procedures directed in the pertinent Joint Services' directives under DLA. With the exception of the additional centralized reporting, preprocurement screening, and management controls required by DIPEC, the Navy manages IPE in the same manner as any other Navy plant equipment item. The Navy prepares the specifications and centrally procures items over \$100,000.

2.5 THE ROLE OF THE AIR FORCE

The Air Force approach to support mobilization requirements differs from the other Services. The decertification of the last two Air Force PEPs in 1984 reflects the Air Force policy to minimize government ownership of both facilities and equipment and rely upon the capability of private industry to produce the end items required for mobilization. This policy is based on the belief that aircraft and airborne weapons systems evolve so rapidly that it is not cost effective to maintain a production capability for items that may soon be obsolete. War consumption items, not subject to such rapid evolution, are primarily conventional ammunition items managed by the Army. The Air Force Logistics Command (AFLC) implements policy received from HQ, USAF. Item managers manage IPE and several other commodities at the Warner Robins Air Logistics Center. Requirements determination flow from the major commands as forecasts to AFLC for consolidation into Air Force wide net requirements for IPE. ALC personnel identify depot replenishment requirements. The Air Force follows the DoD

guidelines and the reporting procedures and requirements for IPE established by DLA and DIPEC. The Air Force considers IPE management to be the same as any other piece of assigned equipment.

2.6 THE ROLE OF THE U.S. MARINE CORPS

USMC follows Navy and DIPEC guidelines for management of IPE. Reports flow through USMC bases and air stations to the Installations and Logistics Department at HQ, USMC. HQMC reviews the functional needs identified by the activities. Procurement documentation is forwarded, screened and then consolidated at the activity level. Acquisition procedures conform to the DIPEC requirements for screening and reutilization. Maintenance of IPE is usually performed in-house or on contract. Two Depot Maintenance Activities (DMAs), are capable of limited IPE repair and rebuild. The USMC owns no PEPs to meet mobilization requirements. With the exception of meeting the centralized controlling requirements imposed by DIPEC, the USMC likewise manages IPE as any other piece of assigned equipment.

2.7 MILITARY SERVICE SUMMARY

Each Military Service has unique requirements and capabilities based on their different missions. Considering that the total amount of IPE used by the Services has steadily declined over the past several years, that IPE has a protracted useful life under most conditions, that only approximately 3,000 new units of IPE of all descriptions are purchased by the Services annually on a combined basis, that there are less and less new procurement dollars available for IPE, and that the general reserve has a poor record of filling Service requirements from the general reserve (only 7.3 percent in FY89), it is evident that more effort and resources should not be devoted to further centralize the management or control of this type of property. Each service that DIPEC now performs for centralized IPE management is currently being done by the Services for non-IPE items as a matter of routine. Each service or function that DIPEC now performs could be done within that Service. For example, each Service has an organic repair/rebuild capability for equipment common and unique to that Service. IPE is not treated in any special way; it is just another commodity. Each Service has in-place procurement organizations and item managers, uses the same Federal Supply System, follows the same Federal Acquisition Regulation and contracts for goods and services. Additionally, to meet DIPEC requirements, each Service reports IPE requirements, goes through the IPE screening process for new acquisitions and reports in-use assets to meet DIPEC cognizant requirements. Each outside functional requirement places an additional burden on limited resources. Each Military Service treats IPE as any other piece of assigned equipment with no special emphasis, except to comply with Joint Service/DLA regulations.

2.8 DETAILED DISCUSSION

This section will present the current system for managing IPE, and recommend logical steps to bring it up to current 1991 realities, identify outdated and outmoded methods of conducting business, describe improvements needed to streamline the system and highlight missions, functions and programs for elimination to save scarce Defense dollars.

2.8.1 IPE Management Costs

The DoD resources allocated for the overall IPE mission must be analyzed to determine if savings are possible through IPE consolidation. This approach is needed in the present environment of troop cuts, reduced resources, base closures, cancellations of major weapons systems, reduction in force of personnel and the staggering costs associated with the current conflict in the Middle East.

To analyze the associated costs, the study posed the following questions for an objective response:

- What major functions are performed in the management of IPE?
- Are all of these functions essential to the IPE mission?
- Are some or all of these functions duplicated?
- Are these functions directed or self-generated?
- Can DoD accomplish the IPE mission without any or all of these functions?
- Is the overall IPE mission current and valid?
- Can other existing organizations perform some or all of these functions?

2.8.2 The Current IPE Mission

The IPE Mission, performed by DIPEC, in simple and concise terms, is shown below:

- Maintenance, Technical and Contract Support for DoD Activities
- DoD General Reserve Management
- DoD Clearinghouse for IPE
- Central Inventory of DoD-owned IPE
- A Lead Standardization Activity and Preparing Activity for Defense Standardization and Specifications Program for IPE
- Mobilization Assets.

2.8.3 Data Maintenance and Technical Functions

The data maintenance, technical and contract support functions are necessary to the IPE mission but it is not necessary for a specialized activity (DIPEC) to perform these functions. These functions could be realigned/transferred to another DLA or Service ICP. A generated mission, DIPEC provides this service free but in the future (DMPD 971) the Services will pay.

Although a benefit, it is not essential that this function be performed by DIPEC. It could be undertaken by the Services in-house, coordinating with DLSC to reduce overhead and administrative costs. Location is not critical to this action, but costs and time are critical factors.

2.8.4 The DoD General Reserve

General reserve management, a directed mission for DIPEC, based in PL 93-155, must be reinstated in the next Congress. The general reserve has decreased 76 percent from 28,158 items of IPE in 1982 to only 6,742 items of IPE in 1990. This significant reduction is due to extended life expectancy, revised dollar criteria for IPE threshold, and reduced scope of equipment classified as IPE.

The present dollar threshold for machine tools classified as IPE is \$5,000, is based on the original acquisition cost. Some of these items have been in use for more than 30 to 40 years. A pending Federal Acquisition Regulation (FAR) change would raise this dollar threshold to \$10,000, a change that will have another impact on the general reserve and still further reduce the number of items considered to be IPE. Even this threshold is low, but it would further reduce the general reserve by another 1,571 items. A minimum \$15,000 threshold would be realistic and would further reduce the reserve an additional 1,165 items. The general reserve would then be reduced to approximately 4,006 items. DIPEC currently retains IPE assets in the general reserve which are inoperable and in need of extensive repair as well as IPE assets which have little or no historical customer demand in either peacetime or emergency periods. Retention of assets in the general reserve with historically low usage or low reutilization potential should be eliminated. DLA has agreed to increase the dollar threshold to \$15,000.

There are 1,902 IPE items considered to be in the general reserve but not actually in DoD possession. These items are on loan to civilian schools under the "Tools for Schools" Program. These "loaned" assets should not be considered as part of the general reserve as they will probably never be returned. Many of the IPE assets currently loaned to schools no longer meet the current definition of IPE. They were manufactured years ago and would be useless to the Services even as a stop gap measure in time of mobilization. While there are over 5,700 items now in use, DIPEC's ability to fill new requests is minimal. Lastly, requests from schools represent only 7.0 percent of the total demands placed on DIPEC and the general reserve can fill only a small percentage of these total requests.

The general reserve was established to provide a source of machine tools to meet peacetime and mobilization requirements for the Services. The general reserve is not a viable, practical or efficient source of IPE for peacetime requirements, since demands placed on DIPEC compared to the match rate for machines issued to Military Services is extremely low.

The Service mobilization requirements are not quantifiable requirements but are projected estimates varying among the different Services. However, as is the case when attempting to use the current general reserve as a source to avoid the use of new procurement dollars for emerging IPE needs, the Services have found that the general reserve is inadequate as a source for longstanding IPE mobilization needs. For example, PEP voids are mobilization requirements for Army planners, yet these voids are known to DIPEC but cannot be filled from the DIPEC general reserve. Under mobilization planning scenarios with an expected 24-month

warning time between M-Day and D-Day, a general (mobilization) reserve of outdated machine tools is not necessary.

Longstanding problems in the management of the general reserve have been highlighted in numerous reports, including the DoD Inspector General Audit Report Number 85-056, the Special Test and Plant Equipment Review Group (STAPERG) and the OSD initiatives set forth in the 1986 "Godwin Memo." The Godwin Memo directed that the IPE retained in the general reserve consist of essential equipment in a ready-to-issue condition. Failure to maintain inactive equipment and obsolete equipment were factors highlighted in these reports. Other issues indicated reporting plant equipment was not cost effective, requirements and procedures to submit manual requisitions for IPE in the general reserve were antiquated and the required reports, especially from contractors, were excessive, duplicative and counter-productive.

The general reserve could be eliminated with no impact on the readiness of the industrial base. Based on historical data for procurement, the general reserve equipment could not be rebuilt and reissued any sooner than the time to manufacture new general purpose equipment. Best case estimates for the rebuild cycle are 10 months, with 12-to-18 month cycles common. The Office of General Industrial Machinery Capital Goods and Industrial Construction of the U.S. Department of Commerce indicates the current average lead time after contract award for delivery of new equipment is nine to 12 months for small to medium size general purpose tools and 12 to 18 months for larger general purpose tools. The lead time for more complex machines, such as machining centers, is 12 to 18 months. DoD machine tool purchases, however, are declining as shown below.

Machine Tool Purchases 1/
(34 FSG)

	FY88	FY89	FY90
Army	33.2	27.0	33.0
Navy	65.4	51.4	37.5
Air Force	27.1	16.4	7.9
DLA	5.9	3.8	6.0
	<hr/> \$ 131.6M	<hr/> \$ 98.6	<hr/> \$ 84.4

1/Source: DD 350 Database

The Department of Commerce statistics for 1990 also indicate that machine tool purchases for DoD represent only 1.0 percent of all of the machine tool orders in the United States as indicated on the following chart.

Total Value of Shipments of Machine Tools 2/
(\$B)

FY88	FY89	FY90
\$ 4.354	\$ 5.835	\$ 6.126

Percentage of DoD Purchases in Relation to Total

FY88	FY89	FY90
3%	2%	1%

2/Source: U.S. Industrial Outlook 1990 - Metal Working Equipment, U.S. Department of Commerce

After considering the age, size, condition, availability and excessive management costs (over 200 manyears of effort), the general reserve should be eliminated. The available assets should be redistributed to fill any Military Service requirements. The remaining assets should be excessed through Defense Reutilization and Marketing Office (DRMO) channels.

Schools using IPE under the "Tools for Schools" Program should retain these machines. When the machines are no longer required, the tools should be returned to DoD as excess. There is no impact on this program since items qualifying as IPE items continue to decrease. No item issued under this DIPEC program to a school has ever been recalled and then issued to meet some higher DoD requirement. As previously stated, many items no longer qualify as IPE or were manufactured so many years ago that they are not needed by DoD even as stop gap measures.

In summary, the general reserve could not meet mobilization requirements even if they were quantifiable. Other programs are in place to supply DoD with the machine tools required for mobilization. An example of this is the Machine Tool Trigger Order Program (MTTOP) administered by the Federal Emergency Management Agency (FEMA). Under this program, numerous machine tool contracts with industry are already in place. Service updates are used to keep requirements current. Other ongoing mobilization planning efforts include the Graduated Mobilization Response (GMR) and Industrial Preparedness Planning (IPP).

2.8.5 DoD Clearinghouse

The DoD Clearinghouse Mission of DIPEC is tied directly to the general reserve. Due to the reduction of IPE in the general reserve over time, the screening process is an inefficient, uneconomical step in the IPE procurement cycle. Submissions of separate DoD IPE requisitions (DD Form 1419) to request DIPEC screening of the general reserve DoD Idle/Excess Inventory usually results in the issue of certificates of non-availability. The used machine tools, when available from DIPEC, are usually unsuitable and must be rejected. The requisition fill rate, when compared with the number of requests funneled through DIPEC, clearly indicates the present procedures are not cost effective. In FY89, for example, IPE screenings for the Military Services indicate only 299 machines were issued against demands for 4,181 machines

for a reutilization rate of only 7.3 percent. The reutilization rate continued to decline in FY90 with only 78 machines redistributed according to DIPEC figures. This DIPEC screening adds a management layer and costs the Services both time and money. DIPEC also uses a Plant Equipment Code (PEC) to identify and to classify IPE. PECs identify only like items and items offered, in many cases, only have the same general characteristics. This is another IPE system imposed upon the Services that is not needed. IPE acquisition must be responsive to expedite maintenance and rebuild and for timely funds obligation, typically when state-of-the-art equipment is needed, the DIPEC screening process offers obsolete and unserviceable items if the equipment is available. Screening is an inefficient use of personnel resources. DLA agreed to use only the NSN and phase out the PEC.

In conducting this study, DIPEC independently provided an analysis of costs in centrally managing DoD's IPE. The Services, upon reviewing the DIPEC data, concluded that the DIPEC report was inaccurate and seriously flawed from their fundamental computation of "replacement costs" of IPE to the equation used in computing the results. The purported savings to the Services through rebuild is questionable. The value of IPE distributed from the general reserve must include the Service acquisition cost of the unit plus the amount actually reimbursed to DIPEC. The savings reported by DIPEC are grossly overstated when "replacement costs" are used as the basis for the value of IPE issued from the general reserve. DIPEC claims a \$46.5M savings for FY90 which is based on the reutilization of 78 machines within DoD. This would average \$596,000 per machine in claimed savings. These figures are at best, highly suspect. Machines were also reutilized by other government agencies, however, they represent no hard dollar savings to DoD. This reutilization was a cost avoidance to these agencies according to DIPEC.

In-use reporting requirements for IPE are not consistent. For example, a lathe in use at a depot or a shipyard is reported to DIPEC in accordance with the joint regulation: "Management of Defense-Owned Industrial Plant Equipment (IPE) (DLAM 4215.1, AR 700-43, NAVSUP PUB 5009, AFM 78-9). An identical lathe, in use aboard a ship, used in a mobile shop set, or with a cost of less than \$5,000, is exempt from the reporting requirement by the same regulation.

If the general reserve were eliminated, the reporting, redistribution and disposal of excess IPE would be conducted as any other type of excess Government property; e.g., machine tools would be listed in weekly issues of the Contractor Inventory Redistribution System (CIRS) sent to machine tool users or the Inventory Reutilization Interrogation System (IRIS) would be reutilized through the normal DRMO process. The screening of excess machine tools would be proactive instead of reactive. DIPEC does not do proactive screening; they wait for the DD Form 1419 requisitions to arrive from the field.

Lastly, DIPEC does not provide DoD customers with listings of IPE in the general reserve. A program designed to provide this asset visibility, the automated General Reserve Interrogation Program (GRIP), was not successfully implemented and was discontinued in 1989. The DIPEC screening requirement should be ended and other existing programs available through the DRMOs, CIRS or, for installation equipment, IRIS, and the General Services Administration (GSA).

2.8.6 Contracting Functions

The contracting function is a mission DIPEC assumed in the past several years. Currently, 44 personnel spaces are authorized. The contracting function procures IPE parts for rebuild and contracts with IPE rebuilders for the service of customer machines. DIPEC offers expertise to the Services in the area of specifications and procurement procedures for IPE, but procures new IPE only on an exception basis. Procurement is still the responsibility of the individual Services. The Services develop their own specifications and procurement procedures. Technical assistance, if needed, is available from DLSC. The Services can more effectively handle IPE-related procurements to achieve mission specific requirements in the required priority and time frame.

The size of the DIPEC Contracting Office is misleading. In addition to sole DIPEC support, the contracting office has the procurement mission for the Defense Depot Memphis. The personnel spaces transferred from the depot to DIPEC could be returned to the depot should a decision be made to disestablish or downscale DIPEC as it is now configured.

There is very little commonality (less than two percent within the Army, for example) of IPE purchases among different Army organizations in any given year. However, about half of all Army IPE is purchased in lots of more than one item.

DoD's position in IPE acquisition in relation to the machine tool industry is small (3 percent FY88, 2 percent FY89 and 1 percent FY90) and getting smaller. While it would be desirable to present one face to industry DoD is not the driving force. The Services will strive to consolidate and project requirements as they are available.

Under normal conditions, the acquisition process, including the funding cycle, takes up to four years and requires extensive customer involvement. Acquisitions should remain under the control of the respective Services and not be added to DIPEC's purview as another centralized function. Also, DIPEC, while procuring repair parts and letting service-type contracts, has little end item purchase experience. A priority of one Service may not be a priority of another Service. Under centralized purchasing, priorities would be lost in an attempt to consolidate buys for volume savings - an unacceptable condition.

The responsibility for IPE acquisition should remain at the Service level. At this level, the Services have control. There is no reason that offers any hard dollar savings to change this arrangement. Consolidation of all Service procurement actions at the DoD level, such as DIPEC, would remove the users of IPE in DoD from the acquisition process. Management at the Service level is the only way to achieve Service prioritization of IPE requirements. DoD IPE acquisition is diminishing at a rapid rate and as such, the need for a separate organization to purchase IPE is not required. It must remain focused at the Service level to achieve mission goals.

2.8.7 Central Inventory of DoD-Owned IPE

The Services presently have in place automated systems, including automated property books, for visibility. These include the Army's CBS-X, EIMS and DD Form 1662s for contractor equipment. The records maintained by DIPEC not only duplicate these systems but often conflict with the data contained in them.

2.8.8 Standardization and Specifications

A Lead Standardization Activity and Preparing Activity for IPE for the Defense Standardization and Specifications Program is another redundant mission of DIPEC necessary to DoD but available through DLSC for the Services involved in the Standardization and Specifications Program. The responsibility for the preparation of specifications, when required, should be centralized at the Service level. Machine tools are commercial items that are built to commercial specifications, have applications across the board, and do not (with the possible exception of IPE going into tactical shops) have the particular requirements of military-peculiar equipment.

The individuals best qualified to prepare specifications and item descriptions for IPE procurement actions are those who work with these machines. They know the requirements, tolerances and capabilities of the machine tools. These individuals are located in the arsenals, plants, logistics centers and shipyards operated by the Services.

2.8.9 Reduce Costs of IPE Management

Since its establishment in 1962, DIPEC has expanded, through the assignment and assumption of new roles and missions, to a present organization of over 550 authorized personnel, of which over 200 are assigned to the DIPEC headquarters alone. DIPEC's established purpose no longer exists - to manage a general reserve in ready-for-issue condition to meet the mobilization requirements of the Military Services. The general reserve, as originally intended, no longer exists. The residue is worn out and obsolete, is not needed by the Military Services and is not ready for issue. Unlikely as it may seem under today's restrictive budgets, coupled with management's concern to ferret out instances when excessive manpower resources are being inefficiently utilized, DIPEC has actually increased in size while the total quantity and dollar value of DoD-owned IPE over the years has dramatically shrunken and continues to shrink.

DIPEC inherited a stockpile of IPE from World War II and the Korean War. Today's complex weapon systems require high technology, state-of-the-art machines to support and maintain them. Throughout this study, the Services reiterated that the nature and use of IPE has changed since DIPEC was originally chartered. Depot level repair and rebuild is very competitive between the Services and contractors. The IPE used today is highly technical, requiring depot level maintenance capability and productivity. However, IPE need not be singled out for special management with a large organization dedicated to "manage" it. The Services manage more technical equipment without an extra management layer.

Closing DIPEC clearly offers the most savings to DoD - more than any other single area addressed by the study. These savings, approximately \$20.5M per year beginning with FY93 through FY97, would realize over \$100M over five years. No other alternative offers DoD any savings near that figure. Piece-meal cuts, cost avoidance, and/or selling "consolidation" as the panacea will save DoD little, if any, hard dollars. DIPEC's centralized management, as currently envisioned, is not cost effective. As previously stated, DIPEC's annual reutilization rate of IPE from the general reserve has declined and continues to decline. In total, DLA utilizes in excess of 550 personnel annually to monitor, repair, and store IPE for the Services' use. While DIPEC/DLA cites Public Law 93-155 as their mandate to retain IPE in the general reserve, Public Law 93-155 does not require a general reserve, but simply that a general reserve may be retained at SECDEF discretion. Further, Public Law 93-155 does not stipulate that IPE or, specifically, any type of equipment, be retained.

In short, considering the points in this study, the alternative to disestablish appears the most viable to achieve significant savings without causing an unacceptable deleterious effect on the individual Services. IPE reutilization, if necessary, can be conducted through DRMOs vice DIPEC in the future.

Elimination of a minimum of 410 DIPEC spaces at the Memphis headquarters and at the two remaining maintenance and storage sites (Mechanicsburg, PA and Stockton, CA) would provide savings of approximately \$20.5M per year between the period FY93 through FY97 alone. This is a very conservative estimate since it recognizes that some spaces would have to be transferred as missions are moved. An example of this is the spaces required by the Defense Depot Memphis for the procurement office. Some 145 spaces were identified that could be used for mission transfers, but this figure is considered very high. Any further reduction of this 145 number would realize savings greater than the \$100+M already identified.

One aspect of IPE management that is necessary and should continue at a reduced level is the repair and rebuild function. There are presently three facilities in existence to perform this mission (A fourth at Columbus, OH, is being closed due to lack of workload.). A simple method to decentralize IPE maintenance at the Service level would be to retain the present Army site at SEAD. The Mechanicsburg and Stockton sites (located on Navy installations) would be closed due to the drastic reduction of workload and any IPE repair and rebuild requirements could be performed by the Army, through the Services' in-house resources or on contract. This would foster competition, which could result in lower costs for IPE maintenance in general. DLA's claims that savings to be achieved by DIPEC performing depot maintenance of IPE are suspect. DLA states \$2.0M could be saved per year by DIPEC performing IPE rebuild instead of SEAD. The DLA analysis, however, counts inspections, condition assessments, maintenance in storage and minor repairs and adjustments as depot maintenance whereas SEAD counts only actual rebuilds. Like items and like work must be compared if meaningful conclusions are to be drawn by the comparison.

The technical data repository managed by DIPEC would be transferred to SEAD where it would be consolidated and made available to the Services when required.

If DoD is to save any substantial money over the next several years in the IPE area, then the disestablishment of DIPEC is the most logical way to achieve these savings.

The storage facilities at the present sites should be operated as they are now under Service control or through the use of Inter-Service Support Agreements (ISSAs). As the items of the general reserve are phased out, IPE storage could be consolidated and any excess storage now used for IPE could be returned for storage of other supplies. The aluminum skid assets should revert to the IPE storage facilities as storage and shipping are where skids are primarily used.

2.8.10 Summary of the Consolidated Service Position

Based upon the data available and the savings to be realized by DoD, the Military Services are unanimous in their position to disestablish DIPEC. Many of the other areas covered in this study become moot points if DIPEC is closed. Obsolete and outdated equipment would be excessed by eliminating the general reserve. IPE would be managed as another item of plant property on a Service standardized basis, eliminating the Plant Equipment Codes (PECs) now used. The IPE specification mission would be decentralized to the Service level. The IPE acquisition function would remain with the Services, and be more effective and productive without the screening process. Acquisition thresholds would be assigned to the local or installation level. Separate reporting of in-use IPE assets would not be required, repair and rebuild would be decentralized to the Service level, and maximum competition would be guaranteed for work by the Services and through outside contracts. Any reutilization of excess IPE, if necessary, would be through DRMOs.

The savings realized by transferring the IPE mission from DLA to the Military Services are considerable. Currently, DIPEC has over 200 authorized spaces at the Memphis headquarters alone, dedicated solely to the management of IPE. The vast majority of these spaces could be eliminated and the IPE would become another item in the Services capital asset inventory. Decreasing defense dollars, as well as recent changes that have swept through Eastern Europe and the situation in the Middle East, make outdated organizations an unnecessary drain on resources. DoD cannot afford to continue paying this cost.

Section 3.0

CONCLUSIONS

3.1 GENERAL

Any cost saving alternative to the present method of providing overall IPE procurement management, storage and maintenance support must be based on sound logic and provide significant benefits to DoD. Any reduction in the IPE support by reducing missions, transferring missions and eliminating all but the most critical IPE services must be supported by a cost effective rationale, while those services required by the users of IPE throughout DoD are still provided. Additionally, any change to the present method of providing support must not only be cost effective - it must be practical, logical, and doable.

Disestablishing organizations by eliminating missions or transferring all or part of these missions to other activities is the most effective way to reduce costs. The large number of base closures and realignments currently pending within DoD provide evidence of such cost savings.

Within the IPE area, the greatest savings can be achieved by closing the activity or organization that will least impact the IPE repair, rebuild and overall management and still provide these required services to the customer.

3.2 REPORT CONCLUSIONS

Based on the available data provided by DLA, DIPEC, and the Military Services, and through the analysis of the current workload, missions, and current functions now performed, the report concluded that the following actions should be accomplished:

- Disestablish DIPEC and transfer the overall management of IPE to the Military Services.
- Eliminate the general reserve, due to its drastic reduction in size and its low reutilization rates over the past few years. Assign existing assets to the Military Services for specified mobilization/peacetime requirements and fill PEP voids. The IPE excesses should then be screened against other DoD requirements and school requests and, those items no longer required should be excessed through DRMO and GSA disposal channels.
- Revert the contracting function in the current DIPEC organization to the Defense Depot Memphis.
- Reduce the maintenance and rebuild mission since the primary mission of the DIPEC maintenance effort is to support the general reserve. The Army should retain the SEAD facility and the DIPEC facilities currently in being should revert to the owning Service, the Navy, for use as appropriate. Repair and rebuild of in-use IPE should be accomplished within the Services' existing in-house repair and rebuild facilities, such as Air Logistics Centers and shipyards and through commercial contracts and interservice arrangements.

- Transfer other functions now performed at DIPEC in the routine management of IPE to the Services. These include such functions as the technical data library, the aluminum skid program, the Specifications and Standards mission and other support. All these functions can be absorbed within existing Service organizations and activities.

- Phase out the "Tools for Schools" Program, since it is no longer a viable source of machine tools for mobilization requirements and for state and local schools. Tools on loan to these institutions should be retained by those institutions and, if no longer required, returned to DoD for disposition or simply donated per FAR 45.6.

- Reevaluate the storage space allocated to the storage of IPE/PEPs in light of this mission transfer initiative and return space not required for IPE or PEP storage to the DoD activity for reallocation for storage of other classes of supply.

Section 4.0

RECOMMENDATIONS

4.1 RECOMMENDATIONS

Based on the review and analysis of the data available, briefings, panel discussions, meetings with key DoD and Service personnel, and a thorough analysis of the available options open to DoD, recommend the disestablishment of DIPEC and the decentralize management of IPE, like other plant equipment, to the Service level. This recommendation maximizes the cost savings available to DoD.